CLAIMS

1.   An anti-soiling detergent composition, containing:

(A) 0.05 to 10 mass% of a polyetheramide-modified organopolysiloxane and/or amino-modified organopolysiloxane;

(B) 0.1 to 30 mass% of at least one type of surfactant selected from nonionic surfactants, amphoteric surfactants, and cationic surfactants;

(C) 0.1 to 20 mass% of a metal chelating agent; and

(D) water.

2.   The anti-soiling detergent composition according to claim 1, containing (E) 0.01 to 5 mass% of a thickener in addition to components (A) to (D).

3.   The anti-soiling detergent composition according to claim 1 or 2, containing (F) 0.1 to 20 mass% of a water-soluble solvent in addition to the above components.
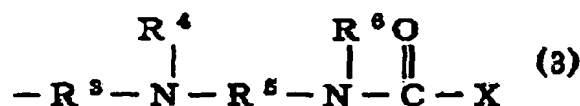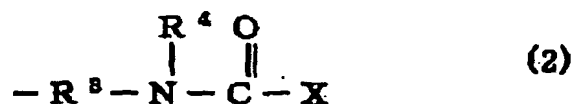
4.   The anti-soiling detergent composition according to claims 1 to 3, wherein component (A) is a polyetheramide-modified organopolysiloxane.

5.   The anti-soiling detergent composition according to claim 4, wherein the polyetheramide-modified organopolysiloxane of component (A) is a polyetheramide-modified organopolysiloxane expressed by average compositional formula (1)

$$R^1_aR^2_bQ^1_cQ^2_dSiO_{(4-a-b-c-d)/2} \qquad (1)$$
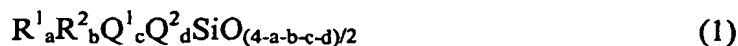
(where a and d are zeros or positive numbers; b and c are positive numbers such that $1.9 \leq a + b + c + d \leq 2.2$; R^1 is a hydrogen atom, a hydroxyl group, or a substituted or unsubstituted monovalent hydrocarbon group with 1 to 6 carbon atoms; R^2 is a monovalent hydrocarbon group with 1 to 6 carbon atoms; Q^1 is a group expressed by general formula (2) or (3)
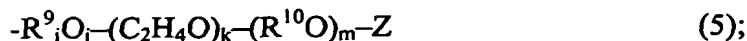
[Chemical Formula 1]

$$
\begin{array}{c}
\quad\ \overset{\displaystyle R^4}{|}\ \ \overset{\displaystyle O}{\|} \\
-R^3-N-C-X
\end{array}
\qquad (2)
$$

$$
\begin{array}{c}
\quad\ \overset{\displaystyle R^4}{|} \qquad\ \ \overset{\displaystyle R^6}{|}\ \overset{\displaystyle O}{\|} \\
-R^3-N-R^5-N-C-X
\end{array}
\qquad (3)
$$
;

R^3 and R^5 are divalent hydrocarbon groups with 2 to 18 carbon atoms; R^4 and R^6 are hydrogen atoms or monovalent hydrocarbon groups with 1 to 6 carbon atoms; X is a group expressed by general formula (4)

$$-R^7{}_eO_f{-}(C_2H_4O)_g{-}(R^8O)_h{-}Y \qquad (4);$$

e and f are each 0 or 1; g and h are zeros or positive integers of 1 or greater; R^7 is a divalent hydrocarbon group with 2 to 18 carbon atoms; R^8 is a divalent hydrocarbon group with 3 to 10 carbon atoms; Y is a hydrogen atom, a monovalent hydrocarbon group with 1 to 18 carbon

5 atoms, an acyl group, or an isocyanic acid group; Q^2 is a group expressed by general formula (5)

$$-R^9{}_iO_j{-}(C_2H_4O)_k{-}(R^{10}O)_m{-}Z \qquad (5);$$

i and j are each 0 or 1; k is a positive integer of 1 or greater; m is zero or a positive integer of 1 or greater; R^9 is a divalent hydrocarbon group with 2 to 18 carbon atoms; R^{10} is a divalent

10 hydrocarbon group with 3 to 10 carbon atoms; and Z is a hydrogen atom, a monovalent hydrocarbon group with 1 to 18 carbon atoms, an acyl group, or an isocyanic acid group; however d and g cannot both be zero at the same time).

6.   The anti-soiling detergent composition according to claim 4, wherein the polyetheramide-modified organopolysiloxane of component (A) is a polyetheramide-modified

15 organopolysiloxane expressed by average compositional formula (6)

$$R^1{}_aR^2{}_bQ^1{}_cQ^2{}_dQ^3{}_{e1}SiO_{(4-a-b-c-d-e1)/2} \qquad (6)$$
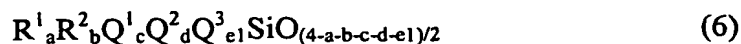
(where a and d are zeros or positive numbers; b, c, and $e1$ are positive numbers such that $1.9 \le a + b + c + d + e1 \le 2.2$; R^1 is a hydrogen atom, a hydroxyl group, or a substituted or unsubstituted monovalent hydrocarbon group with 1 to 6 carbon atoms; R^2 is a monovalent

20 hydrocarbon group with 1 to 6 carbon atoms; Q^1 is a group expressed by general formula (2) or (3)
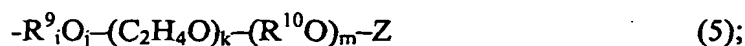
[Chemical Formula 2]

$$-R^3-\overset{\overset{\displaystyle R^4}{|}}{N}-\overset{\overset{\displaystyle O}{\|}}{C}-X \qquad (2)$$

$$-R^3-\overset{\overset{\displaystyle R^4}{|}}{N}-R^5-\overset{\overset{\displaystyle R^6}{|}}{N}-\overset{\overset{\displaystyle O}{\|}}{C}-X \qquad (3)$$

;

R^3 and R^5 are divalent hydrocarbon groups with 2 to 18 carbon atoms; R^4 and R^6 are

25 hydrogen atoms or monovalent hydrocarbon groups with 1 to 6 carbon atoms; X is a group expressed by general formula (4)
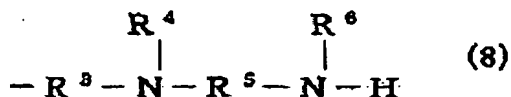
$$-R^7{}_eO_f{-}(C_2H_4O)_g{-}(R^8O)_h{-}Y \qquad (4);$$

e and *f* are each 0 or 1; *g* and *h* are zeros or positive integers of 1 or greater; R^7 is a divalent hydrocarbon group with 2 to 18 carbon atoms; R^8 is a divalent hydrocarbon group with 3 to 10 carbon atoms; Y is a hydrogen atom, a monovalent hydrocarbon group with 1 to 18 carbon atoms, an acyl group, or an isocyanic acid group; Q^2 is a group expressed by general formula (5)

$$-R^9{}_iO_j-(C_2H_4O)_k-(R^{10}O)_m-Z \qquad (5);$$

i and *j* are each 0 or 1; *k* is a positive integer of 1 or greater; *m* is zero or a positive integer of 1 or greater; R^9 is a divalent hydrocarbon group with 2 to 18 carbon atoms; R^{10} is a divalent hydrocarbon group with 3 to 10 carbon atoms; and Z is a hydrogen atom, a monovalent hydrocarbon group with 1 to 18 carbon atoms, an acyl group, or an isocyanic acid group; *d* and *g* cannot both be zero at the same time; Q^3 is a group expressed by general formula (7) or (8)

[Chemical Formula 3]

$$
\begin{array}{c}
R^4 \\
| \\
-R^3-N-H
\end{array}
\qquad (7)
$$

$$
\begin{array}{c}
R^4 \qquad\quad R^6 \\
| \qquad\quad\; | \\
-R^3-N-R^5-N-H
\end{array}
\qquad (8)
$$
;

R^3 and R^5 are divalent hydrocarbon groups with 2 to 18 carbon atoms; and R^4 and R^6 are hydrogen atoms or monovalent hydrocarbon groups with 1 to 6 carbon atoms).

7.   The anti-soiling detergent composition according to any of claims 2 to 6, wherein the thickener of component (E) is at least one compound selected from among thickening polysaccharides, carboxyvinyl polymers, crosslinked polyacrylic acids, and salts thereof.

8.   The anti-soiling detergent composition according to any of claims 3 to 7, wherein the water-soluble solvent of component (F) is at least one compound selected from among alcohols, glycol ethers, and terpene-based hydrocarbon solvents.

9.   The anti-soiling detergent composition according to any of claims 1 to 8, wherein the anti-soiling detergent composition is used in hard-surface applications.

10.   The anti-soiling detergent composition according to any of claims 1 to 9, wherein the anti-soiling detergent composition is used in applications involving restrooms, washstands, baths, and other damp locations.